2004

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF: WU-16J

December 15, 2004

Michael Nickolaus, Director
Division of Oil and Gas
Indiana Department of Natural Resources
402 West Washington Street, Room W293
Indianapolis, Indiana 46204

Dear Mr. Nickolaus:

This letter transmits our final report which documents our findings and recommendations from the evaluation we conducted of your Division's UIC program on June 23-25, 2004. The review was quite productive and we continue to be impressed with the high quality of the UIC program being implemented for Class II wells in Indiana. We also continue to be impressed with the outstanding level of commitment and dedication of both the management team and the staff.

Our overall findings indicate that the Indiana DNR's Division of Oil and Gas is operating a sound and effective UIC program. The Indiana DNR's current program continues to be consistent with the approved program and continues to be on track toward meeting program objectives and workplan commitments. The expertise that your program has developed over the years has enabled the Division of Oil and Gas to continue to implement an exemplary program, despite resource shortfalls. We commend you and your staff for your perseverance in this effort.

Thank you for your hospitality and cooperation during our visit. We look forward to continuing to build on the partnership that has developed between our agencies over the years through technical exchange, information sharing, and coordination on national and regional efforts. We are also appreciative of the role you have played in bringing the Region 5 state and Federal Class II programs together through the joint meetings which you have hosted. If you or members of your staff have questions or need additional information, please contact me at (312) 353-5089 or John Taylor or Lillie Davis of my staff at (312) 886- 4299 or (312) 353- 2202, respectively.

Sincerely yours,

Charles T. Elly

Charles T. Elly, Chief
Underground Injection Control Branch

Enclosure

cc: James AmRhein

THE INDIANA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS
UNDERGROUND INJECTION CONTROL PROGRAM FOR CLASS II WELLS
PROGRAM EVALUATION REPORT
PREPARED BY USEPA, REGION 5
DECEMBER 2004

EXECUTIVE SUMMARY

The Indiana Department of Natural Resources (InDNR) Division of Oil and Gas administers the Class II well program to ensure that underground sources of drinking water (USDWs) are protected from contamination by injection well activities. The InDNR receives a Federal Underground Injection Control (UIC) Grant from the U.S. Environmental Protection Agency (USEPA) for approximately $118,000 to maintain a Class II inventory of approximately 1260 wells. The state's fiscal year runs from July 1 through June 30. From June 23 through 25, 2004, the USEPA Region 5 UIC program review team (Lillie Davis, John Taylor, Jeff McDonald, and Roger Hall) conducted an in-depth review of the InDNR, Division of Oil and Gas' UIC Program for Class II wells. The purpose of the Class II program review process is to ensure that InDNR is adequately carrying out it's program consistent with its approved application, and continuing to protect USDWs. Our last in-depth review of InDNR's UIC program was conducted in 2000. The review team focused on the entire InDNR UIC program; our findings are presented under two general headings: 1) Program Administration; and 2) Technical, including permitting, enforcement, and field activities.

The review team's specific observations and recommendations were discussed during the exit interview with InDNR representatives Mike Nickolaus, Mona Nemecek, Jim AmRhein and Beth Hernly. They are presented in greater detail in this report, with the review team's recommendations at the end of each general area. In sum, we have found that the InDNR continues to administer a high quality UIC program with thorough and timely permit reviews, an enforcement program which focuses on abating and reducing non-compliance, and a field inspection program which has been strengthened through recently adopted controls. The expertise that InDNR's program has developed over the years has enabled the Division of Oil and Gas to continue to implement an exemplary program through the dedication of management and staff, despite resource shortfalls. Among the accomplishments of the past four years, we would specifically highlight the following:

(1) Increased program effectiveness through the restructuring of the Division into 3 sections from the previous 5;

(2) Increased accountability for field activities through the split of duties in the Evansville office that allows for closer monitoring of field activities;

(3) Increased effectiveness of well pluggings through updates to the rules;

(4) Internal process improvements such as formal procedures for approving alternate plugging

methods and materials; and

(5) Increased national involvement including renewal of InDNR's association with the Ground Water Protection Council (GWPC).

We commend the InDNR on their outstanding efforts and we offer our comments to help in the improvement of what is already an excellent program. Our principal recommendations focus on the need for additional staff to meet program workloads and the advisability of updating the codes for enforcement violations to more fully explain the specific problems being dealt with.

PROGRAM ADMINISTRATION

A. Organizational Changes in the Division of Oil & Gas

Mike Nickolaus is the Director of the Division of Oil and Gas. Presently, the InDNR Division Director oversees a staff of 18 employees. InDNR has lost three administrative and one oil and gas inspector positions due to employee turnover and a hiring freeze. Despite the reduced staff, InDNR has been able to maintain a high quality program. The Division is organized into three Sections: Orphan Sites and Administration, Permitting & Compliance, and Field Services. Each of the three Sections reports to an Assistant Division Director, who also serves as the Section Manager. The Division Director coordinates all oil and gas related programs, manages the Division's budget, directs management of senior staff, acts as the proxy for the official representative to the Interstate Oil and Gas Compact Commission (IOGCC), coordinates the utilization of state owned land, acts as the hearings officer for informal hearings, and develops and monitors the Division's strategic plan, and oversees all Division data management initiatives.

Jim AmRhein serves as the Section Manager of the Permitting and Compliance Section. Among other functions, the Section reviews permit applications, conducts file reviews of existing Class II injection wells, provides technical assistance, develops Division programs, and prepares technical and rule documents for consideration and promulgation. The Section also prepares, implements, and tracks compliance actions including Notices of Violation, Administrative Orders, and Penalty Assessments. The Section consists of an Assistant Director, two Petroleum Geologists and two Field Inspectors.

Denny Allison serves as the Section Manager of the Field Services Section. Among other functions, the section conducts site inspections, witnesses well testing and abandonment, conducts site investigations of contamination including water and soil sampling, initiates and field monitors enforcement actions, and responds to citizen complaints regarding oil and gas related operations. The Section consists of an Assistant Director, Field Inspection Manager, Field Geologist, Administrative Assistant and five Field Inspectors. This Section is responsible for most field activities in Indiana, with the exception of two inspectors located in northern Indiana who are part of the Permitting and Compliance Section and thus report to the central office.

Mary Estrada serves as the Section Manager of the Orphan Sites and Administration Section. Among other functions, the Section reviews abandoned well sites for inclusion in a statewide list of sites that may qualify for state closure action. The Section also initiates, monitors, and completes contracts for well closure and site remediation work related to improperly abandoned sites in the orphan sites program. Mary is also responsible for budget preparation, tracking and reporting, and supervision of the Division's central office administrative staff and processes. The Section consists of an Assistant Director, Administrative Manager and Account Clerk. The plugging of wells on the exceptions list is the responsibility of this Section.

B. Budget/ Staffing

As with most states, InDNR's budget has remained essentially flat. As a result, the Division has been unable to increase personnel, thus leaving the program short handed with respect to both administrative and professional staff. While the Division has continued to handle day to day operations of the UIC program, it has become more difficult because of the increasing demands made on staff time. Further, the shortage of staff has prevented the Division from increasing the number of file reviews conducted to a level which would better support program objectives such as more rapid identification of potential problems with wells. This in turn has limited the ability of the enforcement program to deal with these problems. Since the national UIC budget has not been increased over the past 15 years, the Federal grants cover less activity each year due to the inevitable rise in salaries and other operating expenses over time. This situation will probably continue to get worse, as there is no immediate prospect of additional funding on either the state or Federal levels.

C. Rule/ Procedural Changes

The InDNR has continued to update their rules to make them more effective in protecting underground sources of drinking water. The Division has discussed major changes with Region 5 prior to adopting the rules and has agreed to provide the complete packages to the Region in a timely manner for incorporation into required updating of the primacy package in accordance with 40 CFR Part 147. During 2004, the Division revised its rules governing the plugging and abandonment of wells, updated permitting, and made minor changes to Class II rules governing authorization to inject and MIT as follows:

(1) The plugging and abandonment rules now specify that operators must use API standardized cements to plug wells. Further, it adds a requirement that a plugging and abandonment report may only be signed by a person who is listed on the Organizational Report filed by the operator with the Division and also requires the signature of the person who provided the cement. The rule also provides that all flowing wells must have either a mechanical plug or be plugged top to bottom with cement. Another change to the rule provides that operators may now use bullhead plugging, plugging through tubing, or dump bailer plugging for wells. Finally, plugging and abandonment reports must be reviewed and approved by a supervisor prior to submission to the Division's central office.

(2) The new permitting requirements included an increase in permit fees to $250 per well from $100 and an added a requirement that applicants must provide the Division with the Universal Transverse Mercator (UTM) coordinates of the proposed well location.

(3) With respect to rules directly related to Class II wells, the Division added a requirement that states an operator may not implement a change to a Class II well without prior written authorization from the Division and provides that a specific injection authorization is required before injection may begin. For MIT's, the rule was updated to allow for the use of pressures greater than 300 psi on standard annulus pressure tests (SAPT's).

D. Reporting

During the past four years, USEPA has been involved in a detailed strategic planning process which includes the development of program specific measures for each environmental program. These include national Program Activity Measures (PAMs) which need to be reported at the mid-point and end of the Federal fiscal year. At this time, the only PAM measures affecting Class II programs are the percentage of wells maintaining compliance, and the number of inspections conducted per year. In addition, the Office of Ground Water and Drinking Water in EPA Headquarters has led a major effort to define Measures of Success for the UIC Program. These measures will be used to set priorities for the UIC program and thus Headquarters has worked closely with the states and Regions to try to define those activities which best measure program effectiveness. This has included conference calls with states and Regions, as well as working through GWPC. A major focus has been to try to avoid excessive additional reporting, by utilizing the existing 7520 Reporting Forms. It is anticipated that the UIC Measures of Success will be finalized in early 2005 and that initial reporting, including setting baseline numbers, will occur during 2005. The InDNR has joined Region 5 in closely following the process and providing comments when appropriate.

USEPA continues to require submission of the 7520 reporting forms, which have been utilized since the inception of the UIC program. The InDNR has consistently provided these forms to the Region by or ahead of all required due dates. There had been an effort initiated several years ago to substantially revise these forms, however, any changes were put on hold due to the Measures of Success effort. USEPA Headquarters has also initiated a process to develop a new national UIC database. This database would consist of certain key elements which could be electronically accessed from state databases, without the need for the states to change their individual systems. When such a system is implemented, it should be possible to discontinue use of the 7520 forms. Unfortunately, development and implementation of this system will probably be a lengthy process, so InDNR should expect to continue submitting 7520 forms for at least the next several years.

The InDNR has also consistently met all grant requirements. Annual grant applications and

workplans have consistently been submitted in time to qualify for an early award of the annual on-going program grant. The submissions have been complete and accurate and very little follow-up has been required. The InDNR has also provided the mid year and end of year narrative reports necessary to meet grant requirements.

E. Data Management

The InDNR currently utilizes a Microsoft SQL based data system to track the state's Class II and oil and gas wells. This system has been adequate to track the various actions taken including permitting, enforcement and inspections, however, it lacks the sophistication necessary to employ such functions as e-services and seamless data transfer directly from the field. Since the InDNR is moving in the direction of making more reporting and other regulatory activities available over the internet, a system which could better support such needs is desirable. In addition, USEPA and many states are exploring how to better link field and office activities on a real time basis. The state is currently working with the Ground Water Protection Council (GWPC) to adopt the Risk Based Data Management System (RBDMS) which has been developed by the GWPC through funding provided by USEPA and the Department of Energy

InDNR is currently using laptops to acquire field data. The data is transferred to the Division's main database on a routine basis. The Division is also working with the GWPC to develop a new Pocket PC based handheld system that includes GPS capability and which will provide the Division with more timely, accurate, and meaningful data related to the inspection of all wells and facilities including Class II facilities

F. Quality Assurance Management Plan (QMP) and Virtual Procedure Manual (VPM)

The QMP for the InDNR's UIC program was approved by Region 5 on October 17, 2000. Since approvals by USEPA need to be renewed every 5 years, the Division will need to review the document during the next several months, so that any needed updating can be accomplished in time to submit to Region 5 by at least the summer of 2005. The Division has indicated that updates to both the QMP and UIC Program Description will be included in their 2005-2007 Strategic Plan. The approval in 2000 was based in large part on the VPM, which provides an excellent framework to instruct staff on all of the policies and procedures of the Division's program. The Region continues to support the VPM, which has been continuously upgraded over the past 4 years, as a creative and innovative approach to provide both training and on-going assistance and enable the staff to maximize the efficiency of their efforts. Since the Region has developed more specific expectations for QMPs over the past 4 years, it will be necessary to look carefully at how the QMP cross references with the VPM.

G. Partnerships/National Activities

The InDNR has continued to pursue partnerships which have increased the effectiveness of the program, as well as providing for better buy-in by the public in the goals of the Division's program. This has been especially notable in the surface cleanup program, where the Division has continued to support the Southwest Indiana Brine Coalition's efforts through funding of $50,000 per year. In addition, the development and expansion of the joint Division/ Industry partnership dealing with orphan sites has yielded significant results including cost savings to the state of more then $125,000 over the past 2 years. Since the last UIC review in 2000, the partnership has been responsible for plugging and abandoning 58 wells and placing 4 wells back into operation. The InDNR has also continued to partner with other regulatory agencies including the Indiana Department of Environmental Management (IDEM), who the Division works closely with on any oilfield releases to the surface.

Another significant partnership has been the Division's efforts to work closely with Region 5 and the other oil and gas agencies from Region 5 states (Illinois, Michigan and Ohio) in exchanging information and consulting with each other on technical and programmatic issues involving the Class II UIC Program. This partnership has included joint meetings every two to three years, which the InDNR has hosted involving all five agencies and other invited guests, including the Ground Water Protection Council and USEPA Headquarters. The 2004 meeting was held at Turkey Run State Park in July and was quite successful, due in large part to the Division's efforts in coordinating the facilities and helping plan the meeting.

The InDNR also continues to play a major role in national activities including the Interstate Oil and Gas Compact Commission (IOGCC), where the Division Director attends meetings twice a year and has served on various committees. The InDNR has long been active in IOGCC, which is the primary state organization involved in oil and gas production and regulation. IOGCC is currently playing a major role in the carbon sequestration effort led by the Department of Energy. The Division Director also participates as a member of the Appalachian/ Illinois Basin Directors group and on the Council of State Regulatory Officials. Division representatives have also participated in the meetings of the Indiana Oil and Gas Association and the Illinois Oil and Gas Association.

The InDNR has recently became re-engaged with the Ground Water Protection Council (GWPC). GWPC is more focused on UIC activities and provides the states an opportunity to interact with USEPA officials from Headquarters and the various Regions on a wide range of issues impacting state programs. This includes the effort to establish the UIC Measures of Success, where GWPC has co-led the effort with USEPA, and InDNR has provided valuable input. In addition, GWPC has worked with those states interested in adopting the RBDMS data

system. As noted, InDNR is currently working with GWPC to implement RBDMS in Indiana.

H. Emerging Issues

Carbon sequestration has the potential to become a huge workload, although it is not clear at this time what the role of the UIC program will be and what type of well class such activity would be regulated under. InDNR has indicated that they are waiting for USEPA and the Department of Energy (DOE) to work out the regulatory details and framework before they decide how they would regulate it. To the extent that it is used for enhanced recovery, it would likely qualify as Class II injection. Coalbed methane is an emerging technology which has had a large impact on the UIC program in some western states. In Indiana, the interest in coalbed methane has not yet materialized, though a greater interest is expected as more information on reserves becomes available.

Recommendations/Conclusions

1. Region 5 recognizes the reality of budget shortfalls which are affecting governments on all levels. While the InDNR has done an excellent job to date of maintaining a high quality UIC program despite unfilled vacancies, we are concerned about the impact upon the program in the long run if these positions cannot be refilled. Region 5 would especially urge that priority be given to technical support to address file review backlogs.

2. The InDNR continues to update rules to more effectively regulate oil and gas and UIC wells in Indiana. Substantial progress has recently been made, and Region 5 commends the Division's efforts.

3. Region 5 appreciates InDNR's cooperation with changing reporting requirements and the assistance that the Division has provided to national efforts to devise new Measures of Success.

4. Region 5 supports the InDNR's efforts to integrate field activities with the data management system on a real time basis. As USEPA moves toward a new national database which will tie in information from state systems, assistance from state agencies like InDNR will be needed to make the project a reality.

5. During 2005, the quality management plan for the InDNR will need to have its approval renewed by Region 5 . In order to fully address new Regional requirements, it may be necessary to revise the Indiana Virtual Procedure Manual to more closely fit the Standard Operating

Procedures (SOP) function. Any changes should focus on those aspects of the program that the staff feel are not currently well documented. By doing so, the InDNR would be able to memorialize some of the knowledge of the existing, experienced staff.

6. Region 5 commends the strong leadership role InDNR has taken in national and regional activities. We very much appreciate InDNR's assistance in organizing and leading the regional Class II meetings, which have been held at Turkey Run State Park.

TECHNICAL

A. Permitting

The Permitting and Compliance Section issued 68 Class II permits from October 7, 2002 through June 14, 2004. Nine of these were for new wells (to be drilled), forty-nine were for production wells to be converted to injection, two for deepening of existing wells (major modifications) and eight for change in ownership (minor modifications). Five permits were selected for review with issue dates ranging from 11/19/02 thru 5/24/04. Three of the five were for wells to be converted from production to enhanced oil recovery (EOR) and two for new wells to be drilled as salt water disposal (SWD) wells. The permit files/process were compared to the InDNR Oil & Gas Rules for consistency. Two were compared with the Virtual Procedure Manual database for data consistency. All aspects of the permitting process seemed thorough, and calculations and data had more than adequate backup when required from the operators or the field inspection staff.

B. Aquifer Exemptions

During the 2000 evaluation, the potential for "field" aquifer exemptions was discussed, as opposed to the well by well exemptions which have been granted in Indiana in the past. At the time, Region 5 indicated that we had not taken such an approach previously and that any such approach would involve serious questions which would require further study. This has proven not to be an issue in Indiana, as such aquifer exemption requests have been very infrequent (less than 10 since primacy was granted) and no requests have been forwarded on to Region 5 in the past 8 years. InDNR managers indicated that if the Division were to receive an aquifer exemption request in the future, they would want to review it on a well-by-well basis and would not consider granting approval on a field wide basis.

C. Mechanical Integrity Tests (MITs)

Every five years, the regulations require operators to demonstrate that mechanical integrity is being maintained for Class II injection wells through running a pressure test. During the 2000

review, it was noted that many operators were not completing the test by the time of the 5 year anniversary of the last test, and thus required an enforcement notice to get them to belatedly run the test. As a follow-up to the review, a MIT notice letter was developed which is sent out 30-45 days in advance of the MIT demonstration being due. This letter has been extremely successful, and less than 5 % of the operators are late in running the MIT. The number of MIT's run each year depends on the number due for that year. For example, in 2003, 420 MIT's were run as opposed to 236 MIT's run in 2004.

D. Well Pluggings

As of the time of the U.S. EPA review, there were approximately 400 wells listed on the Division's Orphan Well list. In addition, approximately 5 wells are added to the Orphan Well list each year. During State Fiscal Year (FY) 2005, which ends on July 1, 2005, the InDNR has been budgeted $438,226 from the Oil and Gas Environmental fund to address these issues. The budget for the next 2 years should remain the same provided that the new budget is passed early next year by the state legislature. State FY 2004 was the first year that InDNR was required to have a budget appropriated through the State Legislature. Prior to that, the Division was able to spend as needed from the Environmental Fund without a budget.

The Division also has grants totaling $100,000 each year in Capital Funds to be awarded to grassroots not-for-profit groups to do clean-ups on a local level. The grants are each set up for a two year period, for a total of $100,000 per grant per year. Presently two partnerships are funded; one with the Indiana Oil and Gas Association, and another with the South West Indiana Brine Coalition.

In terms of the number of wells plugged, 20 wells were plugged in 1999 and 2000, 13 wells in 2001, 56 in 2002, 38 wells in 2003, and 23 wells in 2004. These projects also include site clean up of tanks, pits and remediation, as well as actual plugging. The Division mostly uses state contracting as the method to set up projects, but also has used grants to support the partnerships mentioned above. The number of plugged wells is tracked by the projects' date of approval by the Department of Administration, Division of Public Works, and are categorized by State Fiscal Year to coincide with budget time frames. Many projects overlap fiscal years, as completion dates occur several months following approvals. The number of wells plugged in a given year has varied due to the size of the various projects, and the availability of contractors to work on the projects.

The Division's long term prospects are to eliminate all wells on the USEPA Exceptions List, inventory Orphan Wells in Indiana and establish a priority rating for each well and to continue to eliminate all level 4 (high priority) wells that currently are or have a high potential to cause

environmental damages. At this point, the Division is plugging high priority and surrounding wells as they are reported. Since taking care of high priority and surrounding wells is currently keeping the Division quite busy, there has not been time to conduct an inventory of known wells and prioritize them. The Division hopes to begin this process within two years.

E. Compliance Evaluations

A key element of the InDNR's approach to compliance is the performance of file reviews on a 5 year cycle for each Class II well. These reviews allow the Division to address changes which have occurred during that period and which can be identified through annual inspection reports, as well as the required self reporting submitted by the operators. The process provides a safeguard that even minor problems will eventually be identified, and helps maintain deterrence by referring violations to the enforcement process. Unfortunately, due to state budget shortfalls, the Division has been unable to fill several vacancies which have occurred in the past few years. The most immediate impact of these staff reductions has been in the ability to maintain the file review schedule which the InDNR committed to as part of the primacy agreement and which supports the entire compliance and enforcement program. Through the first half of Federal Fiscal Year 2004, the Division had completed 75 file reviews, which is well below the pace needed to achieve an average of about 270 file reviews per year if the 5 year review cycle is to be maintained. However, is should be noted that the Division continues to meet the specific commitments made in their annual grant program plans for file reviews.

In addition to file reviews, the Permitting and Compliance Section reviews Quarterly Monitoring Reports that are submitted by operators for all Class II wells. These reports contain information about the maximum pressures, volumes, and number of operating days per month for each well. The information is monitored weekly and reported by month for the preceding quarter. Section personnel review the reports for compliance with permit conditions and program requirements. It appears that these reviews are being successfully completed, and they contribute toward effective compliance.

F. Enforcement and Compliance Assurance

During Federal Fiscal Year 2004, the Division issued 72 Warnings of Noncompliance for non-significant violations. Only 15% of these actions were not corrected in a timely manner and were escalated. The Division issued 85 Notices of Violation during Federal Fiscal Year 2004 with approximately 28% being escalated to the civil penalty stage. The minimum penalty issued was $100, with the highest penalty being $2500.

Region 5's review focused on how the State handles some violations that fall in the significant non-compliance (SNC) category. This includes the ties to the field inspection program, how InDNR determines compliance / noncompliance issues in the office, and how the State communicates to the regulated community.

State-issued Notices of Violation (NOVs) that have a penalty assessed with them are issued from the Indianapolis office. Some violations automatically receive NOVs with penalty. Injection above the permitted maximum injection pressure, unauthorized injection, and failing a mechanical integrity test (MIT) are UIC violations that automatically receive NOVs with penalty. These violations are identified by a field inspector and then are called in to the central (Indianapolis) office. The central office staff then issues the NOV with penalty, usually on the same day. This is an impressive turn-around time and helps to ensure that the operator returns the well to compliance in a timely fashion. The codes used to describe these violations seem to vary based upon what the necessary injunctive relief is. Although operators may understand what injunctive relief is sought, a clear understanding of what the specific violation was should help avoid similar violations in the future.

The Division uses a violation code system to reference non compliance. The codes are used by the database to select the specific description to show on an NOV. It is sometimes unclear from the violation descriptions what the specific underlying violation might be, as the focus seems to be on the injunctive relief sought. An example of this is the UNI violation code which has 5 different descriptions to detail the injunctive relief sought, but a single description of the violation that does not include specific details about the nature of the offense. We will provide more details of our review of the UNI violation code via separate correspondence.

Although the State has a good database system, there seems to be times when ongoing compliance violations were not identified in a timely fashion. Given the strong database system, it seems that some improvements could be made to allow for various points of compliance to be either evaluated during data entry, or on a periodic basis.

G. Citizen Complaints

The Division receives approximately 15 - 20 citizen complaints each year. It appears that InDNR is doing a good job of addressing them, as reflected by files for the individual cases, and also the absence of complaints filed with Region 5. When a complaint is filed by any citizen, the Division's first step is to dispatch an inspector to the area so that they may determine if the complaint is legitimate. If corrective action should be taken by an operator, the inspector will initiate enforcement action accordingly. The violation is then tracked through the enforcement system and is either escalated or released as determined by the inspector.

The InDNR provided the following details on how a recent citizen's complaint was handled. The field office received a complaint from a landowner that oil had been leaking around a well in Vanderburgh County. The field inspector visited the site and found that the well had been leaking and that the operator needed to take measures to stop the leak and clean up the area where the oil had leaked. The inspector issued a notice of violation to the operator giving him thirty days to correct the situation. The inspector reported back after he had re-inspected the well, and found the situation to be completely resolved. The Division notified the operator in writing that the action had been properly addressed, and that the violation action was released.

H. Field inspection Program

The InDNR's field inspection program has historically been strong with very timely witnessing of UIC activities. This includes annual Class II well inspections. Each inspection includes a surface inspection of the well and the associated fluid storage facilities. In addition, pressure readings are taken at each routine inspection. The InDNR indicated that when a routine inspection indicates that a facility is in noncompliance, the inspection frequency is changed to at least once every 60 days until either the noncompliance is corrected, or the case is referred to the Attorney General's Office for legal action.

Recently, allegations of improper conduct by two field inspectors led to investigations by InDNR and other agencies, which are beyond the scope of this report. While the activities in question do not appear related to the UIC program, they have served as a catalyst for a substantial strengthening of the oversight controls provided for this program. The supervision of field staff has taken on a whole new direction under a program InDNR developed called INSPECT CHECK. This program established supervisory standards of review for field activities including supervisory follow-up inspections and unannounced supervisor visits during well tests and plugging activities. It also uses electronic data reporting techniques to ensure that appropriate supervision of staff is taking place. When added to the revisions in the well plugging and abandonment rule noted above, it provides a much more thorough examination of documentation and field activities.

These changes should provide for greater accountability of the Division's inspectors. However, the new authority given to the field inspectors to issue NOVs should be monitored closely. The issuance of NOVs in the field should free up central office staff time, but it also gives the field staff greater power. Despite this, allowing the field inspectors the authority to issue NOVs from the field should allow for faster returns to compliance and a stronger program.

Recommendations/Conclusions

1. The InDNR permit program is very effective. The permit application review process was found to be very thorough with very good documentation. All permit actions were on the conservative side and the permits/conditions were found to be protective of underground sources of drinking water. The paper files and the Virtual Procedure Manual database were identical in matching data content.

2. The InDNR has taken a conservative approach to granting aquifer exemptions, which Region 5 supports. This represents another safeguard to protect USDWs.

3. The IDNR has effectively implemented new call-in procedures for mechanical integrity tests, which have greatly reduced the number of wells not completing the test within the required 5 year timeframe.

4. The InDNR continues to run a very effective well plugging program, which utilizes a variety of approaches to maximize results. Region 5 especially compliments the Division on the innovative partnerships which have been developed.

5. The InDNR's file review process has proven to be an effective tool for assuring compliance. Region 5 strongly recommends that the state seek to fill technical vacancies so that this program can be fully operational and meet review commitments.

6. In general, InDNR maintains an excellent enforcement and compliance program where violations are quickly identified and an appropriate response taken.

7. The InDNR should consider updating the State rules under 312 IAC 16-5-14 to include specific language that the permittee must comply with all conditions of the effective permit.

8. The InDNR should consider revising the descriptions associated with the violation codes so that they more clearly identify what the violation is that the code is being used to represent. Actions should also be taken to ensure that all listings of violation codes are consistent.

9. The InDNR has responsively dealt with citizen issues, including complaints.

10. The InDNR has taken pro-active steps to provide greater direction and oversight to the field inspection program. Region 5 strongly supports this emphasis on increased accountability to ensure that the integrity of the program is maintained.

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December 15, 2004

Michael Nickolaus, Director
Division of Oil and Gas
Indiana Department of Natural Resources
402 West Washington Street, Room W293
Indianapolis, Indiana 46204

Dear Mr. Nickolaus:

In our program evaluation report of December 15, 2004, we discussed the violation code system used by your Agency to reference non compliance. During our June 2004 program evaluation visit, we found that the language of the codes does not always clearly define the specific nature of the violation. Through this letter, we would like to provide further details of our review, which focused on the UNI code.

The UNI code for "Failure to properly inject fluids per 312 IAC 16-5-14" has four (and in one document, five) subcodes under it. The cited regulations are simply the general requirements that the permittee must follow to operate a Class II UIC well, but they do not state anything like "The permittee must comply with the effective permit." Looking at the language associated with the various UNI codes, it is not clear what, specifically, the differences are between the different violations. The table below is based upon a copy of the Enforcement Rule presented by Jim AmRhein and on the descriptions in the Virtual Procedure Manual. It shows the different subcodes under UNI and their different fine amounts.

CODE	DESCRIPTION	FINE FOR ONE OCCURRENCE
UNI1	Cease injection and repair or replace all equipment so that injected fluids are confined to the permitted interval as per 312 IAC 16-5-14. NOTE: A successful demonstration of mechanical integrity is required after repair.	$2500
UNI2	Reduce the injection pressure and/or rate to meet the specifications of the permit in accordance with 312 IAC 16-5-14.	$2500 or $100 (it's listed twice in the Indiana Visual Procedure Manual

UNI3	Cease injection pressure and/or rate to meet the specifications of the permit in accordance with 312 IAC 15-5-14. *This violation is worded as: "Cease injection into non-permitted intervals and either obtain a permit, or seal non-permitted zones. NOTE: Per 312 IAC 16-5-15, a M.I.T. is required prior to commencing injection." in the Indiana Visual Procedure Manual.*	$2500
UNI4	Cease injection into non-permitted intervals and either obtain a permit, or seal non-permitted zones. NOTE: Per 312 IAC 16-5-15, a M.I.T. is required prior to commencing injection. *This violation is worded as: "Cease injection into and plug the wells per 312 IAC 16-5-19." in the Indiana Visual Procedure Manual.*	$2500
UNI5	Cease injection into and plug the wells per 312 IAC 16-5-19. *In the Indiana Visual Procedure Manual, there is no UNI5.*	Not listed in the Indiana Visual Procedure Manual

From these descriptions, it was not clear to us what a specific underlying violation might be. The violation code UNI2 was the only one that seemed to be used in the recent enforcement actions reviewed in the program evaluation.

I hope that this information is useful to you as you look at potentially revising the descriptions associated with the violation codes. If you or members of your staff have questions or need additional information, please contact me at (312) 353-5089 or Jeff McDonald of my staff at (312) 353-6288.

Sincerely yours,

Charles T. Elly

Charles T. Elly, Chief
Underground Injection Control Branch

Enclosure

cc: James AmRhein